



DEQ-VALLEY

MAR 31 2011

TO: _____
FILE: _____

COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY
VALLEY REGIONAL OFFICE

Douglas W. Domenech
Secretary of Natural Resources

4411 Early Road, P.O. Box 3000, Harrisonburg, Virginia 22801
(540) 574-7800 Fax (540) 574-7878
www.deq.virginia.gov

David K. Paylor
Director

Amy Thatcher Owens
Regional Director

EA VR09-0202

**STATE WATER CONTROL BOARD ENFORCEMENT ACTION
AMENDMENT TO
ORDER BY CONSENT ENFORCEMENT ACTION ISSUED TO
TOWN OF ELKTON
FOR
ELKTON STP
VPDES Permit No. VA0026433**

SECTION A: Purpose

This is an Amendment of a Consent Special Order (Amendment) issued under the authority of Va. Code § 62.1-44.15, between the State Water Control Board and Town of Elkton, for the purpose of revising certain provisions of the Consent Special Order issued by the Board to the Town of Elkton on October 20, 2008, and for resolving certain violations of that Order and the State Water Control Law.

SECTION B: Basis for Amendment

1. Elkton owns and operates the Facility located in Rockingham County, Virginia which serves the Town's population of approximately 2639. The Facility is subject to the Permit which authorizes the Facility to discharge treated wastewater to South Fork Shenandoah River, in the Shenandoah River subbasin, Potomac River basin, in strict compliance with the terms and conditions of the Permit.
2. Presently, Elkton is subject to a Consent Order (Order) that became effective October 20, 2008, which provided a schedule of compliance to construct STP upgrades and address I&I problems in its collection system to ensure the Facility is capable of meeting the Permit's effluent limitations and to limit/prevent hydraulic overloading of the Facility during wet weather.

3. The design capacity of the Facility has been rated and approved as 0.40 MGD. During 9 months out of a 20-month period (January 2009 through August 2010), the monthly average flows through the Facility have exceeded the Facility's design capacity. Wet weather in late 2009 and early 2010 indicates that significant I&I problems exist as demonstrated by excessive peak flow events / high flow events which can impact the Facility's performance.
4. In submitting its DMRs, as required by the Permit, Elkton has indicated that it exceeded discharge limitations contained in Part I.A.1 of the Permit, for BOD₅ and TSS in November 2008, December 2008 and January 2009, and for E. coli in December 2008. Elkton attributed the violations to a combination of over wasting of solids in early November 2008 and cold weather, coupled with high influent flows resulting from high rainfall events and the Town's I&I problems. The over wasting of solids was attributed to the Town's contract operator's anticipating bringing on-line a new sludge press as part of Facility upgrades. These events severely impacted plant performance.

The Town also reported it exceeded permit discharge limitations for BOD₅ and TSS in May 2009, December 2009 and February 2010 and for BOD₅ in January 2010. Elkton indicated that it believed the BOD₅ and TSS violations were related to the higher than normal hydraulic loading (influent flows). Particularly during late 2009 and early 2010, the Facility experienced an extended period of unusually high flows due to high rainfall and snow melt (Elkton experienced 3.9 inches of precipitation in December 2009 and 2.8 inches in January 2010). (Elkton experienced 2.95 inches of rain over four days in May 2009).

5. On January 15, 2009, VRO issued Warning Letter W2009-01-V-1024 to Elkton for TSS loading and concentration permit limitation violations in November 2008.
6. On February 9, 2009 and March 11, 2009, VRO issued NOV numbers W2009-02-V-0005 and W2009-03-V-0001 to Elkton for BOD₅ and TSS permit limitation violations in December 2008 and January 2009, and failure to submit plans and specifications for sludge dewatering and UV improvements by December 22, 2008, as required by the Order. The February 9, 2009 NOV also included an unpermitted discharge violation that occurred in December 2008.
7. On March 4, 2009, DEQ staff met with Elkton to discuss the NOV's and the reasons for the violations. The March 4, 2009, meeting included discussions regarding the Facility's operations and the status of Town's corrective actions to address the I&I issues required under the 2008 Order and the recent permit limitation violations.
8. On April 8, 2009, May 6, 2009, June 8, 2009, July 8, 2009, August 13, 2009, September 11, 2009, and October 5, 2009, VRO issued NOV numbers W2009-04-V-0010, W2009-

05-V-0016, W2009-06-V-0001, W2009-07-V-0005, W2009-08-V-0001, W2009-09-V-0001, and W2009-10-V-0002 to Elkton for failure to submit plans and specifications for sludge dewatering and UV improvements by December 22, 2008 as required by the Order. Elkton attributed the delays in submitting the plans and specifications to a combination of delays in obtaining funding caused by the particularities of DEQ's Revolving Loan Program. The July 8, 2009 NOV also cited BOD and TSS loading maximum permit limitation violations in May 2009 that the Town attributed to high influent flows resulting from high rainfall events. In addition, on December 10, 2009, DEQ issued NOV number W2009-12-V-0002 to Elkton for the late submittal of a Quarterly Progress Report due October 10, 2009, as required by the 2008 Order. The progress report was subsequently submitted to DEQ.

9. On February 18, 2010, VRO issued NOV number W2010-02-V-0003 to Elkton for BOD₅ and TSS loading maximum permit limitation violations in December 2009.
10. On March 10, 2010, VRO issued NOV number W2010-03-V-0001 to Elkton for a BOD₅ loading maximum permit limitation violation in January 2010 and for failure to begin construction of the sludge dewatering and UV disinfection upgrades by January 16, 2010, as required by the Order. Elkton attributed the BOD₅ violation to high influent flows resulting from a 2 inch rainfall event on already saturated ground. The delays in beginning construction of the upgrades were attributed to delays in obtaining the funding to proceed.
11. On April 9, 2010, VRO issued NOV number W2010-04-V-0001 to Elkton for BOD₅ and TSS loading average, loading maximum, concentration average and concentration maximum effluent limitation violations in February 2010, and for failure to begin construction of the sludge dewatering and UV disinfection upgrades by January 16, 2010, as required by the Order. Elkton attributed the effluent limitation violations to 8 inches of snow and extremely cold temperatures that created ice formation on both clarifiers' traveling lifts causing their drive chains to break. In addition, the Town attributed the delays in beginning construction to delays in receiving the funding to proceed with the work.
12. On April 27, 2010, DEQ staff met with Elkton to discuss and review the Facility's operational problems and the Town's record keeping problems; the status of the Town's installation of the sludge handling and UV disinfection upgrades; and the status of the Town's efforts in addressing I&I problems. As part of the April 27, 2010, meeting, DEQ toured the Facility to review its operations. During the Facility tour, DEQ noted and concluded that the turbidity meter required by the 2008 Order was non-functional. DEQ requested the Town submit a plan and schedule of corrective actions to further address the I&I issues, complete the Facility upgrades and to address the operational and record keeping problems.

13. On June 10, 2010, VRO issued NOV number W2010-06-V-0002 to Elkton for failure to maintain a UV intensity/turbidity alarm with a remote dialer to notify the Facility operator of discharges of solids exceeding the unit's design parameters.
14. By letters dated May 27, 2010, July 29, 2010, August 25, 2010, and November 22, 2010, Elkton submitted to DEQ a plan and schedule of corrective actions to further address the Town's I&I problems and to complete construction of the Facility upgrades for incorporation into this Amendment.
15. Va. Code § 62.1-44.31 states that: "It shall be unlawful for any owner to fail to comply with any special order adopted by the Board, which has become final under the provisions of this chapter..."
16. Elkton's operating logs indicate that it discharged treated wastewater from the Plant every day from November 1, 2008 through February 28, 2010.
17. Va. Code § 62.1-44.5 states that: "[E]xcept in compliance with a certificate issued by the Board, it shall be unlawful for any person to discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances."
18. The Regulation, at 9 VAC 25-31-50, also states that except in compliance with a VPDES permit, or another permit issued by the Board, it is unlawful to discharge into state waters sewage, industrial wastes or other wastes.
19. Va. Code § 62.1-44.15(5a) states that a VPDES permit is a "certificate" under the statute.
20. The Department has issued no permits or certificates to Elkton other than VPDES Permit No. VA0026433.
21. The South Fork Shenandoah River is a surface water located wholly within the Commonwealth and is "state waters" under State Water Control Law.
22. Based on Elkton's DMRs, Elkton's letters to DEQ, the Warning Letters and NOVs, the April 27, 2010, meeting, and a file review, the Board concludes that Elkton has violated the Order, Va. Code §§ 62.1-44.31 and 62.1-44.5, as well as the Regulation and the Permit, by discharging treated sewage and municipal wastes while concurrently failing to comply with the conditions of either the Permit and/or the Order, as described in paragraphs C(4), C(6) and C(8) above.
23. In order for Elkton to return to compliance, DEQ staff and representatives of Elkton have agreed to a schedule of compliance, which is incorporated as Appendix A of this Amendment and requires Elkton to complete construction of the Facility upgrades and conduct certain I&I corrective actions to address collection system deficiencies.

SECTION D: Agreement and Order

Accordingly, by virtue of the authority granted it in Va. Code §§ 62.1-44.15, the Board orders Elkton, and Elkton agrees to:

1. Perform the actions described in Appendices A and B of this Order which supersedes and cancel Appendix A of the 2008 Order; and
2. Pay a civil charge of **\$3920** within 30 days of the effective date of the Order in settlement of the violations cited in this Order.

Payment shall be made by check, certified check, money order or cashier's check payable to the "Treasurer of Virginia," and delivered to:

Receipts Control
Department of Environmental Quality
Post Office Box 1104
Richmond, Virginia 23218

3. Elkton shall include its Federal Employer Identification Number (FEIN) (**54-6001261**) with the civil charge payment and shall indicate that the payment is being made in accordance with the requirements of this Order for deposit into the Virginia Environmental Emergency Response Fund (VEERF).

And it is so ORDERED this 5th day of August, 2011.



Amy T. Owens, Regional Director
Department of Environmental Quality

Town of Elkton voluntarily agrees to the issuance of this Amendment.

✓ Date: 3-30-11 By: Roy E. Davis, Mayor
(Person) (Title)
Town of Elkton

Commonwealth of Virginia

City/County of Rockingham

The foregoing document was signed and acknowledged before me this 30th day of March, 2011, by Roy E. Davis who is

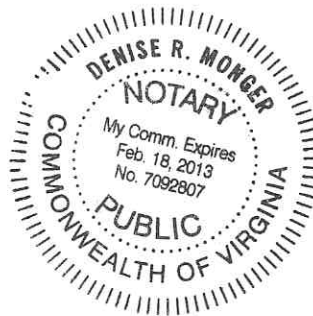
Mayor of Town of Elkton on behalf of the Town of Elkton.

Denise R. Monger
Notary Public

7092807
Registration No.

My commission expires: 2/18/2013

Notary seal:



APPENDIX A SCHEDULE OF COMPLIANCE

1. **By December 31, 2011**, Elkton shall ensure that the map of its collection system is updated, reproducible and contains the following:
 - a. identifies the sewer sub-basins within the collection system;
 - b. numbered manholes located within the sub-basins;
 - c. includes the Town's storm water collection system; and
 - d. an overlay of the local topography.

Elkton shall **by December 31, 2011**, submit the map with the information recited above to DEQ for review and approval. The map will be used for identifying sewer lines with excessive I&I flows.

2. Elkton shall continue to provide proper oversight of its wastewater treatment plant and collection system operators to ensure that the Facility is operated and maintained in accordance with the Permit, the Facility's approved O&M manual, its approved Sludge Management Plan and the Sewage Collection and Treatment Regulations at 9 VAC 25-790-10, *et seq.*, including the recordation of all operations and maintenance activities (e.g. daily operation, sampling, alarming and reporting requirements) and use of approved operations and QAQC forms.
3. **By May 15, 2011**, Elkton shall complete construction of the Facility upgrades in accordance with approved plans and specifications. At the same time Elkton shall apply to DEQ for the issuance of a CTO and approval of a revised O&M Manual for the upgraded Facility, and, if necessary, submit a revised Sludge Management Plan to incorporate any changes in sludge handling practices necessitated by the Facility upgrade.
4. **By December 31, 2011**, Elkton shall complete the North Street Town I&I Project as outlined in its November 22, 2010 Plan of Action schedule.
5. As required by the 2008 Order, Elkton shall continue, as described in its letter dated July 2, 2010, its sewer system investigations of the following sewer basins:
 - a. Comertown/Southeast
 - b. Spotswood
 - c. North Terrace
 - d. North Street
 - e. Downtown Elkton
 - f. Rockingham

Elkton shall ensure that its investigations include the following:

- a. flow monitoring during day and night and wet and dry weather conditions and shall capture the effect of three individual wet-weather events each of which provide a system flow response, including rainfall event representative of those with a one year rainfall recurrence interval, or at least six months if the one year recurrence interval is not achieved provided that there is at least one event where the total 24 hour rainfall exceeds 1.5 inches. A one year storm event, as defined by NOAA's Atlas 14, Volumn2, Version3
http://hdsc.nws.noaa.gov/hdsc/pfds/orb/va_pfds.html;
- b. smoke testing of all sewer collection lines in the subbasins to identify inflow areas;
- c. inspection of all manholes in the subbasins to evaluate I&I sources and structure conditions, Elkton shall document the physical conditions of each manhole via inspection forms and photographs of the manhole interior (survey should note flow measurements and pipe size measurement);
- d. inspections of building plumbing in every instance where smoke testing indicates that inflow sources such as roof leaders and foundation drains may exist in or at the building;
- e. television inspection of all sewer collection system lines in the subbasins to verify smoke testing results or when flow monitoring indicates excessive I&I exists in the lines;
- f. an analysis of all data and information gathered during the investigations and a project report, to be provided to DEQ, which utilizes the data and information to formulate a plan and schedule for repair or sewer system defects and elimination of I&I sources in the referenced subbasins. The plan and schedule shall include targeted flow reduction amounts for the proposed I&I projects and shall identify funding sources for the projects, as well as provide complete details regarding the Town's rate structure for wastewater treatment. All data collection during the I&I investigations, including flow data, smoke testing data and TV camera data shall be included as attachments to the report, Elkton shall address any comments regarding the plan and schedule **within 30 days** of receipt of written comments.

Elkton shall conduct said investigations, in the manner described in paragraph 5 above, according to the schedule described in paragraphs 6 through 7 below, and shall submit the report referenced in 5(f) above, to DEQ, for review and approval, no later than **December 31, 2011**. Upon approval the plan and schedule contained in the report shall be incorporated by reference into this Order and become enforceable as part of this Order.

6. **By May 31, 2011**, Elkton shall complete the wet weather flow monitoring studies for the 2011 calendar year.

7. **By June 1, 2011**, Elkton shall continue the smoke testing of the collection system.
8. **By December 31, 2011**, Elkton shall submit to DEQ for review and approval a plan and schedule (including a PER) for the replacement of the Facility's failing influent screw pumps after the proper submittals of any appropriate CTC and CTO applications in accordance with the SCAT Regulations. Elkton shall respond to any comments regarding the plan and schedule/PER **within 30 days** of receipt of written comments. Upon approval of the corrective action plan, said plan and schedule shall be incorporated by reference into this Order and become enforceable as part of this Order.
9. **By December 31, 2011**, Elkton shall complete an analysis of the clarifiers' design and operational problems and submit to DEQ for review and approval a plan and schedule (including a PER) of rehabilitation or replacement/corrective actions to ensure that the Facility can consistently comply with effluent limitations. Elkton shall respond to any comments regarding the plan and schedule/PER **within 30 days** of receipt of written comments. Upon approval of the corrective action plan, said plan and schedule shall be incorporated by reference into this Order and become enforceable as part of this Order.

GENERAL REQUIREMENTS

10. Elkton shall submit quarterly progress reports to DEQ, with the first report being due **July 10, 2011**. Subsequent Progress Reports will be due by **October 10, January 10, April 10, and July 10**, along with the Facility's Discharge Monitoring Report until the cancellation of this Order. The quarterly progress reports shall contain:
 - a. a summary of all work completed since the previous progress report in accordance with this Order;
 - b. a projection of the work to be completed during the upcoming quarterly period in accordance with this Order; and
 - c. a statement regarding any anticipated problems in complying with this Order.
11. No later than **14 days** following a date identified in the above schedule of compliance Elkton shall submit to DEQ's Valley Regional Office a written notice of compliance or noncompliance with the scheduled item. In the case of noncompliance, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled item.

12. **DEQ Contact**

Unless otherwise specified in this Order, Elkton shall submit all requirements of Appendix A of this Order to:

Steve Hetrick
Enforcement Specialist Sr.
VA DEQ –Valley Regional Office
P.O. Box 3000
Harrisonburg, VA 22801
(540) 574-7833 Phone
(540) 574-7878 Fax
Steven.hetrick@deq.virginia.gov

APPENDIX B: INTERIM EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning with the effective date of this Consent Special Order Amendment and lasting until **60 days** following the CTO issuance for the Facility upgrades as required in Items 8 and 9 of Appendix A, but **no later than 24 months** following the Execution of this Order, Elkton shall limit and monitor the discharge from outfall 001 in accordance with the Permit except as specified below.

EFFLUENT CHARACTERISTICS

DISCHARGE LIMITATIONS

	<u>Monthly Average</u>		<u>Weekly Average</u>		<u>Min.</u>	<u>Max.</u>
	mg/l	kg/d	mg/l	kg/d		
BOD ₅	NA	NA	NA	79	NA	NA
TSS	NA	NA	NA	88	NA	NA

NA = Not Applicable